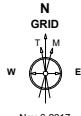


Cub Creek Energy, LLC

Location	Weld County, CO	Slot	KNIGHT 6
Field	WATTENBERG	Well	W KNIGHT 6
Installation	Knight Pad	Wellbore	W KNIGHT 6 (PWB)



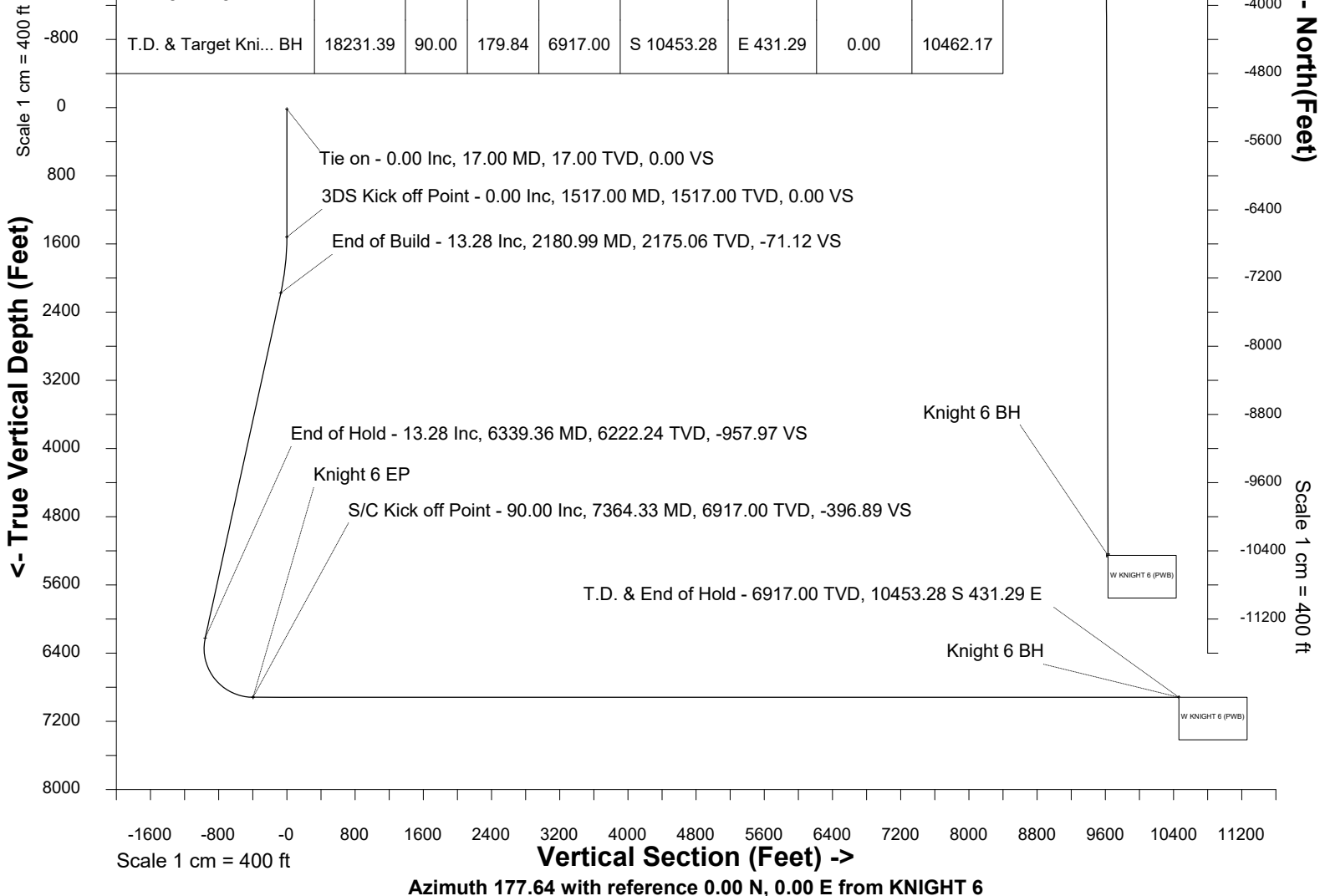
Nov-8-2017
 EMM-2015 Dip: 66.59 deg Field: 52154.0 nT
 Lat: N40 11 52.9440 Long: W105 2 31.0920 Elev: 4993.00 ft
 Magnetic North is 8.54 deg East of True North
 GRID North is 0.30 deg East of True North
 To correct azimuth from True to GRID subtract 0.30 deg
 To correct azimuth from Magnetic to GRID add 8.25 deg

Created by sean.dolfinger
 Date plotted 14-Jul-2020
 Plot reference is W KNIGHT 6 (PWB).
 Ref wellpath is W KNIGHT 6 (PWP#1).
 Coordinates are in Feet reference KNIGHT 6.
 True Vertical Depths are reference Rig Datum.
 Measured Depths are reference Rig Datum.
 Rig Datum: Planned Datum #1
 Rig Datum to Mean Sea Level: 5011.00 ft.
 Plot North is aligned to GRID North.

Scale 1 cm = 400 ft **East (Feet) ->**
 -800 0 800 1600

WELL PROFILE DATA

Point	MD	Inc	Azi	TVD	North	East	deg/100ft	V. Sect
Tie on	17.00	0.00	0.00	17.00	S 0.00	W 0.00		0.00
KOP	1517.00	0.00	19.45	1517.00	S 0.00	W 0.00	0.00	0.00
End of Build	2180.99	13.28	19.45	2175.06	N 72.24	E 25.50	2.00	-71.12
End of Hold	6339.36	13.28	19.45	6222.24	N 972.96	E 343.50	0.00	-957.97
Target Knight 6 EP	7364.33	90.00	179.84	6917.00	N 413.73	E 400.13	10.00	-396.89
T.D. & Target Kni... BH	18231.39	90.00	179.84	6917.00	S 10453.28	E 431.29	0.00	10462.17



SYSDRILL
Well Design Combined Report
Wellbore: W KNIGHT 6 (PWB)



Wellhead Details							
Name	Latitude	Longitude	Northing	Easting	North	East	Slot Elevation Above Ground
KNIGHT 6	40.19775000	-105.04197000	1315213.2616	3127946.0946	105.65S	0.55E	0.00

Declination		
Date	Source	Time
Nov-6-2017	EMM-2015	14:52

Installation Details						
Name	Installation Position (Latitude)	Installation Position (Longitude)	Northing	Easting	Coord System Name	North Alignment
Knight Pad	40.19804000	-105.04197000	1315318.9022	3127945.5490	NAD83 Based Colorado State Planes, Northern Zone, US Feet	Grid

Summary Wellpath								
MD[ft]	Inc[deg]	Azi[deg]	TVD[ft]	Vertical Depth SS	North[ft]	East[ft]	Dogleg [deg/100ft]	Vertical Section[ft]
17.00	0.00	0.00	17.00	-4994.00	0.00N	0.00E		0.00
1517.00	0.00	19.45	1517.00	-3494.00	0.00N	0.00E	==>	0.00
2180.99	13.28	19.45	2175.06	-2835.94	72.24N	25.50E	2.00	-71.12
6339.36	13.28	19.45	6222.24	1211.24	972.96N	343.50E	==>	-957.97
7364.33	90.00	179.84	6917.00	1906.00	413.73N	400.13E	10.00	-396.89
18231.39	90.00	179.84	6917.00	1906.00	10453.28S	431.29E	==>	10462.17

Interpolated Wellpath									
MD[ft]	Inc[deg]	Azi[deg]	TVD[ft]	North[ft]	East[ft]	Dogleg [deg/100ft]	Vertical Section[ft]	Station Position (Latitude)	Station Position (Longitude)
0.00	0.00	0.00	0.00	0.00N	0.00E		0.00	40.19775000	-105.04197000
17.00	0.00	0.00	17.00	0.00N	0.00E	==>	0.00	40.19775000	-105.04197000
100.00	0.00	0.00	100.00	0.00N	0.00E	==>	0.00	40.19775000	-105.04197000
200.00	0.00	0.00	200.00	0.00N	0.00E	==>	0.00	40.19775000	-105.04197000
300.00	0.00	0.00	300.00	0.00N	0.00E	==>	0.00	40.19775000	-105.04197000
400.00	0.00	0.00	400.00	0.00N	0.00E	==>	0.00	40.19775000	-105.04197000
500.00	0.00	0.00	500.00	0.00N	0.00E	==>	0.00	40.19775000	-105.04197000
600.00	0.00	0.00	600.00	0.00N	0.00E	==>	0.00	40.19775000	-105.04197000
700.00	0.00	0.00	700.00	0.00N	0.00E	==>	0.00	40.19775000	-105.04197000
800.00	0.00	0.00	800.00	0.00N	0.00E	==>	0.00	40.19775000	-105.04197000
900.00	0.00	0.00	900.00	0.00N	0.00E	==>	0.00	40.19775000	-105.04197000
1000.00	0.00	0.00	1000.00	0.00N	0.00E	==>	0.00	40.19775000	-105.04197000
1100.00	0.00	0.00	1100.00	0.00N	0.00E	==>	0.00	40.19775000	-105.04197000
1200.00	0.00	0.00	1200.00	0.00N	0.00E	==>	0.00	40.19775000	-105.04197000
1300.00	0.00	0.00	1300.00	0.00N	0.00E	==>	0.00	40.19775000	-105.04197000
1400.00	0.00	0.00	1400.00	0.00N	0.00E	==>	0.00	40.19775000	-105.04197000
1500.00	0.00	0.00	1500.00	0.00N	0.00E	==>	0.00	40.19775000	-105.04197000
1517.00	0.00	19.45	1517.00	0.00N	0.00E	==>	0.00	40.19775000	-105.04197000
1617.00	2.00	19.45	1616.98	1.65N	0.58E	2.00	-1.62	40.19775451	-105.04196789
1717.00	4.00	19.45	1716.84	6.58N	2.32E	2.00	-6.48	40.19776803	-105.04196156
1817.00	6.00	19.45	1816.45	14.80N	5.22E	2.00	-14.57	40.19779055	-105.04195102
1917.00	8.00	19.45	1915.70	26.29N	9.28E	2.00	-25.88	40.19782203	-105.04193629
2017.00	10.00	19.45	2014.47	41.04N	14.49E	2.00	-40.41	40.19786245	-105.04191738
2117.00	12.00	19.45	2112.62	59.03N	20.84E	2.00	-58.12	40.19791174	-105.04189431
2180.99	13.28	19.45	2175.06	72.24N	25.50E	2.00	-71.12	40.19794792	-105.04187738
2217.00	13.28	19.45	2210.11	80.04N	28.26E	==>	-78.80	40.19796929	-105.04186737
2317.00	13.28	19.45	2307.43	101.70N	35.90E	==>	-100.13	40.19802864	-105.04183960
2417.00	13.28	19.45	2404.76	123.36N	43.55E	==>	-121.46	40.19808799	-105.04181182
2517.00	13.28	19.45	2502.09	145.02N	51.20E	==>	-142.78	40.19814734	-105.04178405
2617.00	13.28	19.45	2599.41	166.68N	58.84E	==>	-164.11	40.19820669	-105.04175628
2717.00	13.28	19.45	2696.74	188.34N	66.49E	==>	-185.44	40.19826604	-105.04172850
2817.00	13.28	19.45	2794.06	210.00N	74.14E	==>	-206.76	40.19832538	-105.04170073

All data is in Feet unless otherwise stated
Coordinates are from Slot MD's are from Rig and TVD's are from Rig (Planned Datum #1 5011.0ft above Mean Sea Level)
Vertical Section is from 0.00N 0.00E on azimuth 177.64 degrees
Bottom hole distance is 10462.17 Feet on azimuth 177.64 degrees from Wellhead
Calculation method uses Minimum Curvature method
Prepared by
Date Printed: 14-Jul-2020

SYSDRILL
Well Design Combined Report
Wellbore: W KNIGHT 6 (PWB)



Interpolated Wellpath									
MD[ft]	Inc[deg]	Azi[deg]	TVD[ft]	North[ft]	East[ft]	Dogleg [deg/100ft]	Vertical Section[ft]	Station Position (Latitude)	Station Position (Longitude)
2917.00	13.28	19.45	2891.39	231.66N	81.79E	==>	-228.09	40.19838473	-105.04167295
3017.00	13.28	19.45	2988.72	253.32N	89.43E	==>	-249.42	40.19844408	-105.04164518
3117.00	13.28	19.45	3086.04	274.98N	97.08E	==>	-270.74	40.19850343	-105.04161740
3217.00	13.28	19.45	3183.37	296.64N	104.73E	==>	-292.07	40.19856278	-105.04158963
3317.00	13.28	19.45	3280.69	318.30N	112.37E	==>	-313.40	40.19862213	-105.04156185
3417.00	13.28	19.45	3378.02	339.96N	120.02E	==>	-334.72	40.19868147	-105.04153408
3517.00	13.28	19.45	3475.35	361.62N	127.67E	==>	-356.05	40.19874082	-105.04150630
3617.00	13.28	19.45	3572.67	383.28N	135.31E	==>	-377.38	40.19880017	-105.04147853
3717.00	13.28	19.45	3670.00	404.94N	142.96E	==>	-398.70	40.19885952	-105.04145075
3817.00	13.28	19.45	3767.32	426.60N	150.61E	==>	-420.03	40.19891887	-105.04142298
3917.00	13.28	19.45	3864.65	448.26N	158.26E	==>	-441.36	40.19897822	-105.04139520
4017.00	13.28	19.45	3961.98	469.92N	165.90E	==>	-462.68	40.19903757	-105.04136743
4117.00	13.28	19.45	4059.30	491.58N	173.55E	==>	-484.01	40.19909691	-105.04133965
4217.00	13.28	19.45	4156.63	513.24N	181.20E	==>	-505.34	40.19915626	-105.04131188
4317.00	13.28	19.45	4253.95	534.90N	188.84E	==>	-526.66	40.19921561	-105.04128410
4417.00	13.28	19.45	4351.28	556.56N	196.49E	==>	-547.99	40.19927496	-105.04125632
4517.00	13.28	19.45	4448.61	578.23N	204.14E	==>	-569.32	40.19933431	-105.04122855
4617.00	13.28	19.45	4545.93	599.89N	211.79E	==>	-590.65	40.19939366	-105.04120077
4717.00	13.28	19.45	4643.26	621.55N	219.43E	==>	-611.97	40.19945300	-105.04117300
4817.00	13.28	19.45	4740.58	643.21N	227.08E	==>	-633.30	40.19951235	-105.04114522
4917.00	13.28	19.45	4837.91	664.87N	234.73E	==>	-654.63	40.19957170	-105.04111745
5017.00	13.28	19.45	4935.24	686.53N	242.37E	==>	-675.95	40.19963105	-105.04108967
5117.00	13.28	19.45	5032.56	708.19N	250.02E	==>	-697.28	40.19969040	-105.04106189
5217.00	13.28	19.45	5129.89	729.85N	257.67E	==>	-718.61	40.19974975	-105.04103412
5317.00	13.28	19.45	5227.21	751.51N	265.31E	==>	-739.93	40.19980909	-105.04100634
5417.00	13.28	19.45	5324.54	773.17N	272.96E	==>	-761.26	40.19986844	-105.04097857
5517.00	13.28	19.45	5421.87	794.83N	280.61E	==>	-782.59	40.19992779	-105.04095079
5617.00	13.28	19.45	5519.19	816.49N	288.26E	==>	-803.91	40.19998714	-105.04092301
5717.00	13.28	19.45	5616.52	838.15N	295.90E	==>	-825.24	40.20004649	-105.04089524
5817.00	13.28	19.45	5713.84	859.81N	303.55E	==>	-846.57	40.20010584	-105.04086746
5917.00	13.28	19.45	5811.17	881.47N	311.20E	==>	-867.89	40.20016518	-105.04083969
6017.00	13.28	19.45	5908.50	903.13N	318.84E	==>	-889.22	40.20022453	-105.04081191
6117.00	13.28	19.45	6005.82	924.79N	326.49E	==>	-910.55	40.20028388	-105.04078413
6217.00	13.28	19.45	6103.15	946.45N	334.14E	==>	-931.87	40.20034323	-105.04075636
6317.00	13.28	19.45	6200.47	968.11N	341.79E	==>	-953.20	40.20040258	-105.04072858
6339.36	13.28	19.45	6222.24	972.96N	343.50E	==>	-957.97	40.20041585	-105.04072237
6417.00	6.55	43.48	6298.70	984.60N	349.52E	10.00	-969.35	40.20044771	-105.04070059
6517.00	6.94	139.25	6398.26	984.15N	357.41E	10.00	-968.58	40.20044638	-105.04067236
6617.00	15.91	163.70	6496.23	966.37N	365.22E	10.00	-950.50	40.20039747	-105.04064473
6717.00	25.64	170.34	6589.63	931.80N	372.71E	10.00	-915.64	40.20030246	-105.04061854
6817.00	35.52	173.46	6675.62	881.48N	379.67E	10.00	-865.08	40.20016424	-105.04059457
6917.00	45.44	175.36	6751.59	816.95N	385.87E	10.00	-800.34	40.19998700	-105.04057356
7017.00	55.39	176.70	6815.23	740.15N	391.13E	10.00	-723.40	40.19977614	-105.04055615
7117.00	65.35	177.75	6864.60	653.44N	395.29E	10.00	-636.59	40.19953806	-105.04054287
7217.00	75.31	178.65	6898.22	559.44N	398.23E	10.00	-542.55	40.19927999	-105.04053412
7317.00	85.28	179.46	6915.05	461.01N	399.84E	10.00	-444.14	40.19900978	-105.04053016
7364.33	90.00	179.84	6917.00	413.73N	400.13E	10.00	-396.89	40.19888000	-105.04053000
7417.00	90.00	179.84	6917.00	361.07N	400.28E	==>	-344.26	40.19873542	-105.04053044
7517.00	90.00	179.84	6917.00	261.07N	400.57E	==>	-244.33	40.19846093	-105.04053126
7617.00	90.00	179.84	6917.00	161.07N	400.86E	==>	-144.40	40.19818643	-105.04053209
7717.00	90.00	179.84	6917.00	61.07N	401.14E	==>	-44.48	40.19791193	-105.04053292
7817.00	90.00	179.84	6917.00	38.93S	401.43E	==>	55.45	40.19763743	-105.04053375
7917.00	90.00	179.84	6917.00	138.93S	401.72E	==>	155.37	40.19736293	-105.04053458
8017.00	90.00	179.84	6917.00	238.93S	402.00E	==>	255.30	40.19708843	-105.04053541
8117.00	90.00	179.84	6917.00	338.93S	402.29E	==>	355.23	40.19681393	-105.04053624
8217.00	90.00	179.84	6917.00	438.93S	402.58E	==>	455.15	40.19653943	-105.04053706
8317.00	90.00	179.84	6917.00	538.93S	402.86E	==>	555.08	40.19626494	-105.04053789
8417.00	90.00	179.84	6917.00	638.93S	403.15E	==>	655.01	40.19599044	-105.04053872

All data is in Feet unless otherwise stated
Coordinates are from Slot MD's are from Rig and TVD's are from Rig (Planned Datum #1 5011.0ft above Mean Sea Level)
Vertical Section is from 0.00N 0.00E on azimuth 177.64 degrees
Bottom hole distance is 10462.17 Feet on azimuth 177.64 degrees from Wellhead
Calculation method uses Minimum Curvature method
Prepared by
Date Printed: 14-Jul-2020

SYSDRILL
Well Design Combined Report
Wellbore: W KNIGHT 6 (PWB)



Interpolated Wellpath									
MD[ft]	Inc[deg]	Azi[deg]	TVD[ft]	North[ft]	East[ft]	Dogleg [deg/100ft]	Vertical Section[ft]	Station Position (Latitude)	Station Position (Longitude)
8517.00	90.00	179.84	6917.00	738.93S	403.44E	==>	754.93	40.19571594	-105.04053955
8617.00	90.00	179.84	6917.00	838.93S	403.72E	==>	854.86	40.19544144	-105.04054038
8717.00	90.00	179.84	6917.00	938.93S	404.01E	==>	954.79	40.19516694	-105.04054121
8817.00	90.00	179.84	6917.00	1038.93S	404.30E	==>	1054.71	40.19489244	-105.04054204
8917.00	90.00	179.84	6917.00	1138.93S	404.58E	==>	1154.64	40.19461794	-105.04054286
9017.00	90.00	179.84	6917.00	1238.93S	404.87E	==>	1254.57	40.19434344	-105.04054369
9117.00	90.00	179.84	6917.00	1338.93S	405.16E	==>	1354.49	40.19406894	-105.04054452
9217.00	90.00	179.84	6917.00	1438.93S	405.44E	==>	1454.42	40.19379445	-105.04054535
9317.00	90.00	179.84	6917.00	1538.93S	405.73E	==>	1554.34	40.19351995	-105.04054618
9417.00	90.00	179.84	6917.00	1638.93S	406.02E	==>	1654.27	40.19324545	-105.04054701
9517.00	90.00	179.84	6917.00	1738.93S	406.30E	==>	1754.20	40.19297095	-105.04054783
9617.00	90.00	179.84	6917.00	1838.93S	406.59E	==>	1854.12	40.19269645	-105.04054866
9717.00	90.00	179.84	6917.00	1938.93S	406.88E	==>	1954.05	40.19242195	-105.04054949
9817.00	90.00	179.84	6917.00	2038.92S	407.16E	==>	2053.98	40.19214745	-105.04055032
9917.00	90.00	179.84	6917.00	2138.92S	407.45E	==>	2153.90	40.19187295	-105.04055115
10017.00	90.00	179.84	6917.00	2238.92S	407.74E	==>	2253.83	40.19159845	-105.04055198
10117.00	90.00	179.84	6917.00	2338.92S	408.02E	==>	2353.76	40.19132395	-105.04055280
10217.00	90.00	179.84	6917.00	2438.92S	408.31E	==>	2453.68	40.19104945	-105.04055363
10317.00	90.00	179.84	6917.00	2538.92S	408.60E	==>	2553.61	40.19077496	-105.04055446
10417.00	90.00	179.84	6917.00	2638.92S	408.88E	==>	2653.53	40.19050046	-105.04055529
10517.00	90.00	179.84	6917.00	2738.92S	409.17E	==>	2753.46	40.19022596	-105.04055612
10617.00	90.00	179.84	6917.00	2838.92S	409.46E	==>	2853.39	40.18995146	-105.04055695
10717.00	90.00	179.84	6917.00	2938.92S	409.74E	==>	2953.31	40.18967696	-105.04055777
10817.00	90.00	179.84	6917.00	3038.92S	410.03E	==>	3053.24	40.18940246	-105.04055860
10917.00	90.00	179.84	6917.00	3138.92S	410.32E	==>	3153.17	40.18912796	-105.04055943
11017.00	90.00	179.84	6917.00	3238.92S	410.60E	==>	3253.09	40.18885346	-105.04056026
11117.00	90.00	179.84	6917.00	3338.92S	410.89E	==>	3353.02	40.18857896	-105.04056109
11217.00	90.00	179.84	6917.00	3438.92S	411.18E	==>	3452.95	40.18830446	-105.04056192
11317.00	90.00	179.84	6917.00	3538.92S	411.46E	==>	3552.87	40.18802996	-105.04056274
11417.00	90.00	179.84	6917.00	3638.92S	411.75E	==>	3652.80	40.18775546	-105.04056357
11517.00	90.00	179.84	6917.00	3738.92S	412.04E	==>	3752.73	40.18748097	-105.04056440
11617.00	90.00	179.84	6917.00	3838.92S	412.32E	==>	3852.65	40.18720647	-105.04056523
11717.00	90.00	179.84	6917.00	3938.92S	412.61E	==>	3952.58	40.18693197	-105.04056606
11817.00	90.00	179.84	6917.00	4038.92S	412.90E	==>	4052.50	40.18665747	-105.04056689
11917.00	90.00	179.84	6917.00	4138.92S	413.18E	==>	4152.43	40.18638297	-105.04056771
12017.00	90.00	179.84	6917.00	4238.92S	413.47E	==>	4252.36	40.18610847	-105.04056854
12117.00	90.00	179.84	6917.00	4338.92S	413.76E	==>	4352.28	40.18583397	-105.04056937
12217.00	90.00	179.84	6917.00	4438.91S	414.04E	==>	4452.21	40.18555947	-105.04057020
12317.00	90.00	179.84	6917.00	4538.91S	414.33E	==>	4552.14	40.18528497	-105.04057103
12417.00	90.00	179.84	6917.00	4638.91S	414.62E	==>	4652.06	40.18501047	-105.04057186
12517.00	90.00	179.84	6917.00	4738.91S	414.90E	==>	4751.99	40.18473597	-105.04057268
12617.00	90.00	179.84	6917.00	4838.91S	415.19E	==>	4851.92	40.18446147	-105.04057351
12717.00	90.00	179.84	6917.00	4938.91S	415.48E	==>	4951.84	40.18418697	-105.04057434
12817.00	90.00	179.84	6917.00	5038.91S	415.76E	==>	5051.77	40.18391247	-105.04057517
12917.00	90.00	179.84	6917.00	5138.91S	416.05E	==>	5151.69	40.18363797	-105.04057600
13017.00	90.00	179.84	6917.00	5238.91S	416.34E	==>	5251.62	40.18336348	-105.04057682
13117.00	90.00	179.84	6917.00	5338.91S	416.62E	==>	5351.55	40.18308898	-105.04057765
13217.00	90.00	179.84	6917.00	5438.91S	416.91E	==>	5451.47	40.18281448	-105.04057848
13317.00	90.00	179.84	6917.00	5538.91S	417.20E	==>	5551.40	40.18253998	-105.04057931
13417.00	90.00	179.84	6917.00	5638.91S	417.48E	==>	5651.33	40.18226548	-105.04058014
13517.00	90.00	179.84	6917.00	5738.91S	417.77E	==>	5751.25	40.18199098	-105.04058097
13617.00	90.00	179.84	6917.00	5838.91S	418.06E	==>	5851.18	40.18171648	-105.04058179
13717.00	90.00	179.84	6917.00	5938.91S	418.34E	==>	5951.11	40.18144198	-105.04058262
13817.00	90.00	179.84	6917.00	6038.91S	418.63E	==>	6051.03	40.18116748	-105.04058345
13917.00	90.00	179.84	6917.00	6138.91S	418.92E	==>	6150.96	40.18089298	-105.04058428
14017.00	90.00	179.84	6917.00	6238.91S	419.20E	==>	6250.89	40.18061848	-105.04058511
14117.00	90.00	179.84	6917.00	6338.91S	419.49E	==>	6350.81	40.18034398	-105.04058593
14217.00	90.00	179.84	6917.00	6438.91S	419.78E	==>	6450.74	40.18006948	-105.04058676
14317.00	90.00	179.84	6917.00	6538.91S	420.06E	==>	6550.66	40.17979498	-105.04058759

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Vertical Section is from 0.00N 0.00E on azimuth 177.64 degrees
Bottom hole distance is 10462.17 Feet on azimuth 177.64 degrees from Wellhead
Calculation method uses Minimum Curvature method
Prepared by
Date Printed: 14-Jul-2020

SYSDRILL
Well Design Combined Report
Wellbore: W KNIGHT 6 (PWB)



Interpolated Wellpath									
MD[ft]	Inc[deg]	Azi[deg]	TVD[ft]	North[ft]	East[ft]	Dogleg [deg/100ft]	Vertical Section[ft]	Station Position (Latitude)	Station Position (Longitude)
14417.00	90.00	179.84	6917.00	6638.91S	420.35E	==>	6650.59	40.17952048	-105.04058842
14517.00	90.00	179.84	6917.00	6738.91S	420.64E	==>	6750.52	40.17924598	-105.04058925
14617.00	90.00	179.84	6917.00	6838.91S	420.92E	==>	6850.44	40.17897148	-105.04059007
14717.00	90.00	179.84	6917.00	6938.90S	421.21E	==>	6950.37	40.17869698	-105.04059090
14817.00	90.00	179.84	6917.00	7038.90S	421.50E	==>	7050.30	40.17842248	-105.04059173
14917.00	90.00	179.84	6917.00	7138.90S	421.78E	==>	7150.22	40.17814798	-105.04059256
15017.00	90.00	179.84	6917.00	7238.90S	422.07E	==>	7250.15	40.17787348	-105.04059339
15117.00	90.00	179.84	6917.00	7338.90S	422.36E	==>	7350.08	40.17759899	-105.04059421
15217.00	90.00	179.84	6917.00	7438.90S	422.64E	==>	7450.00	40.17732449	-105.04059504
15317.00	90.00	179.84	6917.00	7538.90S	422.93E	==>	7549.93	40.17704999	-105.04059587
15417.00	90.00	179.84	6917.00	7638.90S	423.22E	==>	7649.85	40.17677549	-105.04059670
15517.00	90.00	179.84	6917.00	7738.90S	423.50E	==>	7749.78	40.17650099	-105.04059753
15617.00	90.00	179.84	6917.00	7838.90S	423.79E	==>	7849.71	40.17622649	-105.04059836
15717.00	90.00	179.84	6917.00	7938.90S	424.08E	==>	7949.63	40.17595199	-105.04059918
15817.00	90.00	179.84	6917.00	8038.90S	424.36E	==>	8049.56	40.17567749	-105.04060001
15917.00	90.00	179.84	6917.00	8138.90S	424.65E	==>	8149.49	40.17540299	-105.04060084
16017.00	90.00	179.84	6917.00	8238.90S	424.94E	==>	8249.41	40.17512849	-105.04060167
16117.00	90.00	179.84	6917.00	8338.90S	425.22E	==>	8349.34	40.17485399	-105.04060250
16217.00	90.00	179.84	6917.00	8438.90S	425.51E	==>	8449.27	40.17457949	-105.04060332
16317.00	90.00	179.84	6917.00	8538.90S	425.80E	==>	8549.19	40.17430499	-105.04060415
16417.00	90.00	179.84	6917.00	8638.90S	426.08E	==>	8649.12	40.17403049	-105.04060498
16517.00	90.00	179.84	6917.00	8738.90S	426.37E	==>	8749.05	40.17375599	-105.04060581
16617.00	90.00	179.84	6917.00	8838.90S	426.66E	==>	8848.97	40.17348149	-105.04060663
16717.00	90.00	179.84	6917.00	8938.90S	426.94E	==>	8948.90	40.17320699	-105.04060746
16817.00	90.00	179.84	6917.00	9038.90S	427.23E	==>	9048.82	40.17293249	-105.04060829
16917.00	90.00	179.84	6917.00	9138.90S	427.52E	==>	9148.75	40.17265799	-105.04060912
17017.00	90.00	179.84	6917.00	9238.90S	427.80E	==>	9248.68	40.17238349	-105.04060995
17117.00	90.00	179.84	6917.00	9338.89S	428.09E	==>	9348.60	40.17210899	-105.04061077
17217.00	90.00	179.84	6917.00	9438.89S	428.38E	==>	9448.53	40.17183449	-105.04061160
17317.00	90.00	179.84	6917.00	9538.89S	428.66E	==>	9548.46	40.17155999	-105.04061243
17417.00	90.00	179.84	6917.00	9638.89S	428.95E	==>	9648.38	40.17128549	-105.04061326
17517.00	90.00	179.84	6917.00	9738.89S	429.24E	==>	9748.31	40.17101099	-105.04061409
17617.00	90.00	179.84	6917.00	9838.89S	429.52E	==>	9848.24	40.17073649	-105.04061491
17717.00	90.00	179.84	6917.00	9938.89S	429.81E	==>	9948.16	40.17046199	-105.04061574
17817.00	90.00	179.84	6917.00	10038.89S	430.10E	==>	10048.09	40.17018749	-105.04061657
17917.00	90.00	179.84	6917.00	10138.89S	430.38E	==>	10148.01	40.16991299	-105.04061740
18017.00	90.00	179.84	6917.00	10238.89S	430.67E	==>	10247.94	40.16963849	-105.04061823
18117.00	90.00	179.84	6917.00	10338.89S	430.96E	==>	10347.87	40.16936399	-105.04061905
18217.00	90.00	179.84	6917.00	10438.89S	431.25E	==>	10447.79	40.16908949	-105.04061988
18231.39	90.00	179.84	6917.00	10453.28S	431.29E	==>	10462.17	40.16905000	-105.04062000

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SYS DRILL
Well Design Combined Report
Wellbore: W KNIGHT 6 (PWB)



Targets							
Name	North[ft]	East[ft]	TVD[ft]	Latitude	Longitude	Northing	Easting
Knight 6 BH	10453.28S	431.29E	6917.00	40.16905000	-105.04062000	1304760.45	3128377.36
Knight 6 EP	413.73N	400.13E	6917.00	40.19888000	-105.04053000	1315626.98	3128346.21

Survey Tool Program						
Reference	Survey Name	MD[ft]	TVD[ft]	Survey Tool	Error Model	
590216	Planned	1517.00	1517.00	WdW Rate Gyro	Standard	
590215	Planned	18231.39	6917.00	ISCWSA MWD	Rev 4 + SAG + FLT	

Notes